July 12, 2012 1420 East 6th Ave. P.O. Box 200701 Helena, MT 59620-0701

Environmental Quality Council Montana Department of Environmental Quality Montana Department of Fish, Wildlife and Parks Fisheries Bureau **Endangered Species Coordinator Bozeman Office** Montana State Library, Helena MT Environmental Information Center Montana Audubon Council Montana Wildlife Federation Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722 Montana River Action Network, 304 N 18th Ave., Bozeman, MT 59715 Park Conservation District, 5242 Highway 89 South, Livingston, MT 59047 U.S. Army Corp of Engineers, Helena U.S. Fish and Wildlife Service, Helena State Historic Preservation Office, Helena Joe Brooks Chapter TU, P.O. Box 1378, Livingston, MT 59047 Trout Unlimited, 321 East Main Street, Suite 411, Bozeman, MT 59715 June Kinnick, 346 Cokedale Road, Livingston, MT 59047

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding to a project calling to restore a short reach of Miner Creek, a tributary to Billman Creek in the Yellowstone drainage. The project calls for removing an existing non-functioning culvert and replacing it with a larger EcoArchTM culvert with two associated overflow pipes along the existing road grade. Fencing would be installed from the gate of an existing corral system to funnel horses to the established stream crossing to continue to allow access to pastureland on the opposite side of the stream. A gravity-fed stock water system would be installed off-channel to provide water for livestock using the corrals. A vegetated buffer, including a contoured infiltration depression, would be constructed to capture sediment and nutrients produced in the corral system and prevent these materials from entering the active channel. The intent of this project is to improve habitat and water quality for resident Yellowstone cutthroat trout in a reach of Miner Creek. This project is located on Miner Creek approximately 7 miles west of the town of Livingston in Park County.

Please submit any comments that you have by 5:00 P.M., August 10, 2012 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this

draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer Habitat Protection Section Fisheries Bureau

e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT

Fisheries Division Montana Fish, Wildlife and Parks Miner Creek Culvert Replacement and Riparian Enhancement Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 that directs the Department to administer a Future Fisheries Improvement Program. The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the replacement of an existing non-functioning culvert and the installation of fencing, a stock-water tank and an infiltration depression to eliminate adverse impacts from livestock over-use associated with an adjacent corral system located on Miner Creek. Miner Creek currently supports a slightly hybridized population of Yellowstone cutthroat trout. The project site is located approximately 7 miles west of the town of Livingston in Park County on property owned by June Kinnick.

- I. <u>Location of Project</u>: This project will be conducted on Miner Creek, a tributary to Billman Creek located in the Yellowstone River drainage within Township 2 South, Range 8 East, Section 26 in Park County (Attachment 1).
- II. <u>Need for the Project</u>: One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to "restore and enhance degraded fisheries habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on private and public lands. This proposed project would help meet this goal.

Miner Creek currently supports a slightly hybridized to un-hybridized population of Yellowstone cutthroat trout. A short reach of Miner Creek presently receives significant grazing and trampling pressure from horses that cross the stream when accessing pasture from an existing corral system (Attachment 2). The existing culvert crossing is currently non-functioning, resulting in the horses fording the stream and creating an over-widened channel with eroding stream banks. The stream crossing also has been a source of stock water, increasing the tendency for horses to congregate and loaf along the bed and banks of the stream. Additionally, the corridor between the existing corrals and the stream is denuded of vegetation and, as a result, there is no filter to prevent sediment and nutrients from entering the active channel. This intent of this project would be to keep the horses off the stream, establish a vegetated buffer and funnel livestock across the stream over a functional, and much larger, arch culvert.

III. Scope of the Project:

This proposed project would remove the existing non-functional culvert and replace it with a new, larger EcoArchTM pipe. Permanent fencing would be installed between the existing corral gate and the new

culvert to funnel livestock toward the new crossing and to pasture located on the other side of the stream. A gravity fed stock water system would be installed in the corral to provide an alternate source of water for livestock and a vegetated buffer, as well as an infiltration depression, would be installed to help filter and capture sediment and nutrients before entering the stream. Fencing would be installed to protect the new buffer. Gravel would also be placed on the stream crossing corridor to minimize fine sediment production. About 75 feet of stream channel would be protected by the project and about 100 square yards of riparian corridor and uplands would be re-vegetated and excluded from grazing. This project is expected to cost \$41,782.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$36,663.00. The remainder of the funding would come from in-kind services from the landowner (\$3,575) and the Natural Resources and Conservation Service (\$1,422).

IV. <u>Environmental Impact Checklist</u>:

Please see attached checklist.

V. <u>Explanation of Impacts to the Physical Environment</u>

1. Terrestrial and aquatic life and habitats.

Resident fish populations within this reach of Miner Creek, as well as downstream waters would be enhanced by reducing sediment and nutrient loading into the stream and by enhancing vegetation within the riparian corridor.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during culvert removal. To minimize turbidity, the operation of equipment in the active stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization). A 124 permit (Montana Stream Protection Act) will be obtained from Montana Fish, Wildlife and Parks and the U.S. Army Corp of Engineers will be contacted to determine the need to meet 404 provisions of the Clean Water Act. In the long-term, water quality in Miner Creek is expected to improve as a result of the reduction in sediment and nutrient loading coming from the adjacent corral system.

3. Geology and soil quality, stability and moisture.

Soils within the footprint of the construction site would be temporarily disturbed during construction. All disturbed areas would be protected with erosion control blanket and seeded with native grass seed.

4. Vegetation cover, quantity & quality.

The existing denuded area located between the corral and stream crossing would be vegetated and protected with fencing, allowing for the recovery of vegetation within the riparian corridor.

5. Aesthetics.

In the short term, aesthetics would be adversely impacted due to ground disturbance and the presence of heavy construction equipment. In the longer term, aesthetics would be improved by restoring a degrade reach of riparian corridor. The project is expected to be completed in less than one week.

7. Unique, endangered, fragile or limited environmental resources.

Yellowstone cutthroat trout have been classified as a species of special concern in Montana due to their declining numbers and shrinking distribution. Miner creek supports a slightly hybridized to un-hybridized population of these fish. This project is expected to improve water quality in Miner Creek and restore portions of the riparian corridor. These habitat improvements are expected to enhance the Yellowstone cutthroat trout population.

9. Historic and archaeological sites

The project site previously has been disturbed with the installation of the existing culvert and continued overuse by livestock. As a result, there is a very low likelihood that cultural properties will be impacted by the proposed project. Should cultural materials be inadvertently discovered during the project, the State Historic Preservation Office will be contacted and the site will be investigated.

VI. <u>Explanation of Impacts on the Human Environment</u>.

None

VII. <u>Discussion and Evaluation of Reasonable Alternatives.</u>

1. No Action Alternative

If no funding is provided, the applicant would have to either seek other sources of funding to complete the project or existing land use activities will continue to degrade the water quality of Miner Creek; and aquatic habitat for Yellowstone cutthroat trout will remain diminished.

2. The Proposed Alternative

The proposed alternative is designed to improve water quality and habitat for Yellowstone cutthroat trout located in a reach of Miner Creek. Presently, a highly degraded stream crossing associated with an existing corral system is contributing excessive sediment and nutrients into the stream. This project would significantly reduce this sediment and nutrient loading problem. The project is expected to enhance a resident Yellowstone cutthroat trout population.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The project application to the Future Fisheries Improvement Program has been posted on the Montana Fish, Wildlife and Park webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The Fish, Wildlife and Parks Commission also will review the proposed project and funding will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks webpage: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on August 10, 2012.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Section
Fisheries Bureau
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620
Telephone: (406) 444-2432

e-mail: mlere@mt.gov

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701 (406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title <u>Miner Creek Culvert Replacement and Riparian Enhancement Project</u> Division/Bureau Fisheries Bureau -Future Fisheries Improvement

Description of Project <u>The Future Fisheries Improvement Program is proposing to provide partial funding to eliminate adverse impacts from livestock over-use on a reach of Miner Creek. The project calls for replacing an under-sized and non-functional culvert, the installation of fencing to funnel livestock from an existing corral system to the newly installed crossing and the installation of a stock water tank and infiltration depression. The intent is to reduce sediment and nutrient loading into the stream. The project site is located approximately 7 miles west of the town of Livingston in Park County.</u>

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

FOIENTIAL IMPACT ON PHIST	<u> </u>	V IIIOIVIIBIVI				
	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			Х			Х
2. Water quality, quantity & distribution			х			Х
3. Geology & soil quality, stability & moisture			Х			Х
4. Vegetation cover, quantity & quality			х			Х
5. Aesthetics			Х			Х
6. Air quality				Х		
7. Unique, endangered, fragile, or limited environmental resources			Х			Х
8. Demands on environmental resources of land, water, air & energy				Х		
9. Historical & archaeological sites				Х		Х

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

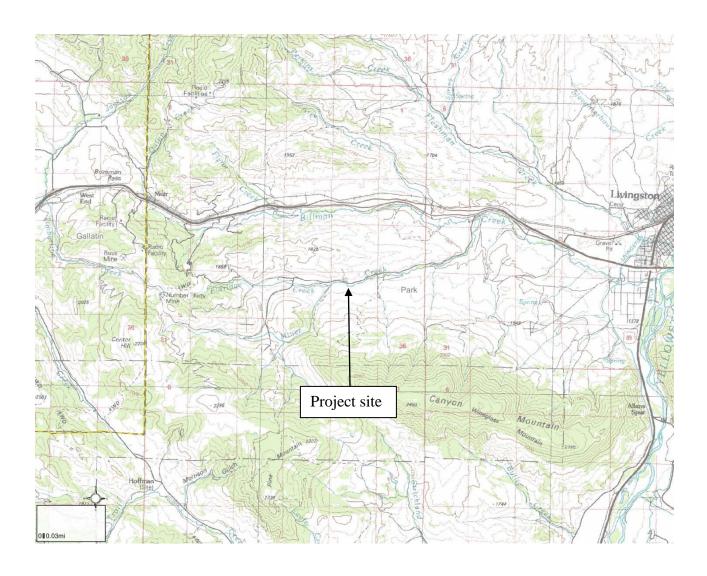
POTENTIAL IMPACTS ON	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				Х		
2. Cultural uniqueness & diversity				Х		
3. Local & state tax base & tax revenue				Х		
4. Agricultural or industrial production				Х		
5. Human health				X		
6. Quantity & distribution of community & personal income				Х		
7. Access to & quality of recreational and wilderness activities				Х		
8. Quantity & distribution of employment				Х		
9. Distribution & density of population & housing				Х		
10. Demands for government services				Х		
11. Industrial & commercial activity				Х		
12. Demands for energy				Х		
13. Locally adopted environmental plans & goals				Х		
14. Transportation networks & traffic flows				Х		

Other groups or agencies contacted or which may have overlapping jurisdiction <u>Park Conservation District</u>, <u>US Fish and Wildlife Service</u>, <u>US Army Corp of Engineers</u>, <u>Montana Department of Environmental Quality</u>, <u>State Historic Preservation Office</u>

Individuals or groups contributing to this EA <u>Carol Endicott, Montana Fish, Wildlife and Parks</u> Recommendation concerning preparation of EIS <u>No EIS required.</u>

EA prepared by: Mark Lere

Date: July 6, 2012



ATTACHMENT 1. Map of Miner Creek.



ATTACHMENT 2